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Radiation Processing in the Philippines: Developments and Prospects

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Radiation processing is the treatment by radiation to get the desired effects in the products. It offers various advantages in the field of sterilization of medical products, food irradiation and a treatment of a variety of products, which have direct relevance to industrial productivity and healthcare.

Various R&D activities in the Philippines have been undertaken since 1965 by the Philippine Atomic Energy Commission/Philippine Nuclear Research Institute (PAEC/PNRI), the academe and other government research institutions utilizing the gamma irradiation facility of PNRI and the recently established electron beam (EB) irradiation facility. These are demonstration facilities to assess the techno-commercial viability of the processes such as decontamination of spices, herbal products and cosmetic raw materials, food irradiation and radiation sterilization of medical devices. The new areas being explored include the use of EB-grafted non-woven fabrics as metal adsorbents and the use of modified carrageenan as plant growth promoter. These studies strongly indicate that radiation processing has a strong potential for technology transfer to Philippine industries. This paper presents an overview of current developments in research activities and commercial applications of radiation processing in the Philippines, the different radiation processing facilities, the ongoing upgrading of the gamma irradiation facility to meet the demands of the industry and the technology transfer activities currently being undertaken.

Country/Organization invited to participate

Philippines

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